

SPEICHEL GANG CARCINOMA– A RARE CASE REPORT

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ABSTRACT

Kleinsasser et al in 1968 first to describe speichelgang carcinoma, which is also called as salivary ductal carcinoma of the parotid. It is an aggressive salivary gland neoplasm. Salivary ductal carcinoma occurs exclusively in major salivary glands, parotid gland is a predominant site. It's an aggressive epithelial tumor form of that shows greater similarities to that of ductal carcinoma of female breast. It most commonly affects male. Some cases it develops from pre-existing benign lesion of the parotid. We present an atypical case of salivary ductal carcinoma in a female and to offer some clinical importance of this a typical form of carcinoma of parotid

KEYWORDS: Speichelgang Carcinoma & Ductal Carcinoma of Female Breast

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INTRODUCTION

Speichelgang carcinoma is a clinicopathologically distinct salivary tumor that was originally recognized by Kleinsasser et al., in 1968¹. WHO classification as “an aggressive adenocarcinoma”. It gained highly recognition in the year of mid to late 1980s. Since the first publication of high-grade salivary ductal carcinoma, more than 200 cases have been reported in the literature^{2,3}. There is well-defined male to female around 4:1 ratio; predominantly it occurs after the age of 50 years with a mean age of 64 years. It commonly occurs in parotid, but sublingual and submandibular gland tumors, oral minor salivary gland tumors are also been reported in literature. No etiologic factors are known till date. In most common cases associated with facial nerve dysfunction with cervical lymphadenopathy

Histopathologically, Comedonecrosis which is similar to the histopathological picture of carcinoma of the breast within ducts is seen. Roman bridge formation and an intraductal cribriform pattern are other histopathological features. Solid areas with psammoma bodies may be found on occasion. Immunohistochemistry evaluation of salivary ductal carcinoma display sensitivity for low and high molecular cytokeratins and S-100 protein is usually shows non reactive, except for the low-grade variant⁴ of speichelgang carcinoma. We passionate to make this case report because of the atypical variety of speichelgang carcinoma or salivary ductal carcinoma that occurs in female.

CASE PRESENTATION

A 50 years old female was referred to our hospital with a painful left parotid tumefaction for the past 6 months. On clinical examination a well-defined swelling present in the left side of face which is soft, mobile and Tender on palpation, no regional lymph nodes with facial nerve involvement. (Figure 1)

Laboratory investigations reveals mild anemia, other biological parameters are normal. Chest x-ray shows no active pleuropulmonary lesions. Routine haematoxylin and eosin staining and immunohisto chemical reactions (Cytokeratin 14, HER-2) showing features of salivary duct carcinoma (SDC). (Figure 2)

MRI shows large, moderately enhancing soft tissue density lesion arising from left parotid gland with no regional cervical lymph node involvement (Figure 3). Mammography shows negativity for breast carcinoma. With these clinical and laboratory data we arrived to a pre-emptive diagnosis of left parotid tumor, possibly to be malignant. Total parotidectomy with Radical neck dissection upto level I- IV was performed (figure 4) with sacrificing facial nerve. Post operatively patient was under adjuvant theaphy.

Based on mammography, clinical, histopathological and IHC interpretation, tumor such as basaloid squamous cell carcinoma (BSCC), Polymorphous low grade adenocarcinoma (PLGA), Papillary cystadenocarcinoma (PCA), Small Cell carcinoma (SmCC), Metastatic tumor (lung, breast carcinoma) were excluded to confirm the diagnosis salivary ductal carcinoma. With a follow up of two years patient was alive with no clinical signs of recurrence.

DISCUSSIONS

Salivary ductal carcinoma is first described by Kleinsasser in 1980, Its a high grade vigorously, atypical salivary gland neoplasm occurs most commonly in major salivary glands, initially more than 200 cases are reported in literature. Pathologically and morphologically these tumor shows more resemblance to ductal carcinoma of female breast.

The WHO definition for salivary duct carcinoma follows “an epithelial tumor of high grade malignancy which resemble carcinoma of female breast, histologically it shows large cell aggregates resembles distended salivary ducts. The neoplastic epithelium shows a combination of Roman bridge, solid growth pattern, cribriform, and, often looping with central necrosis both in the primary lesion and the lymph node metastases”. This extremely atypical carcinoma that histopathologically resemble comedocarcinoma of female breast. Its an aggressive form of neoplasm with rapid growing mass its frequently involve the parotid gland with facial nerve involvement and as an propensity to metastasis through the temporal bone via perineural spread^{5,6}. It grows vigorously with scope of early distant metastases and displays local recurrence and high mortality rate. Lymphadenopathy are noted in 35% of cases and facial paralysis observed 40% of cases. Immuno histochemical findings are not useful, but a constant over expression of cytokeratin and Her2/neu⁷ have been described. Non-reactive to myoepithelial cell tumor markers suggestive that of an invasive variant of speichelgang carcinoma. Lack of S100 and P63 expression in present case suggestive of a high grade invasive variant⁸. The treatment of this lesion involves total parotidectomy with radical neck dissection of lesional tissue and its associated structures followed by postoperative radiotherapy^{9,10}.

CONCLUSIONS

Immense knowledge in Head and neck pathology is essential both clinically and surgically to rule out pathologies. We report a very rare case of salivary ductal carcinoma, which occurs in female at the 5th decade of life early diagnosis, proper chemotherapy and radiotherapy supports the ecological cure of disease.

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FIGURE LEGENDS

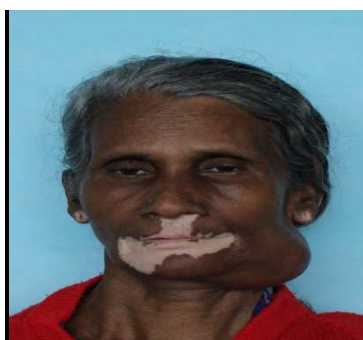


Figure 1: Preoperative Left Parotid Tumefaction

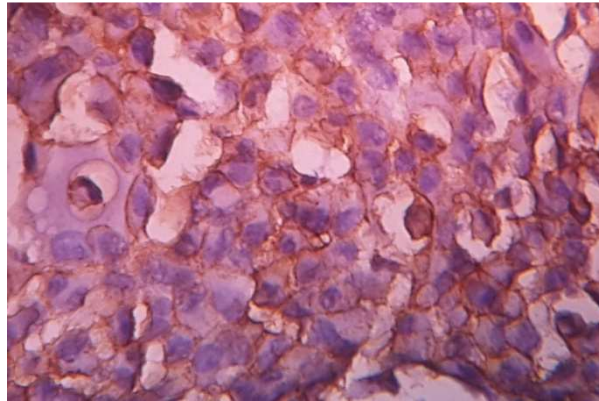


Figure 2: Histopathologic Findings of Salivary Duct Carcinoma 100 X. (HER -2)



Figure 3: MRI Enhanced Section shows Tumor Mass



Figure 4: Intraoperative Parotidectomy Displays Mass of Tumor